

GILL TREMLETT

SUPERVISORY SKILLS

# TARGETS



WORLD HEALTH ORGANIZATION



Programme for  
Control of Diarrhoeal Diseases



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## TARGETS







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# TARGETS

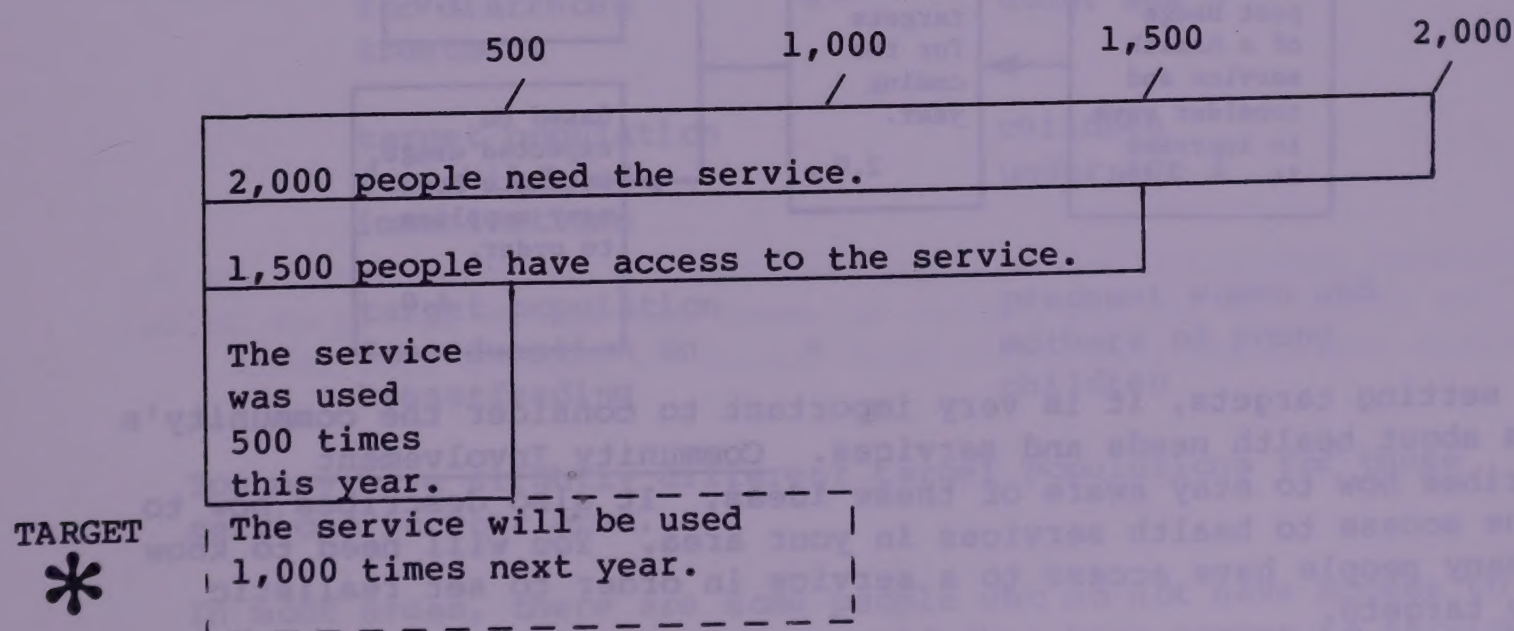
## INTRODUCTION

If you know where you want to go, you are more likely to get there! That is why it is important to have goals. If you have goals, you know what you are trying to do. You can also see your progress towards achieving the goals and feel proud of your work.



As a supervisor of a health area, you will want to set goals for usage of health services. These goals can be called usage targets. Usage targets show how much you expect a service to be used.\*

### EXAMPLE



\*Note: The words "coverage" and "coverage targets" are sometimes used in relation to some services instead of the words "usage" and "usage targets." They mean the same thing.



Targets may be set for any primary health care service such as immunizations, treatment of diarrhoea, treatment of malaria, prenatal care, or other services. Targets should be set each year, at a regular time. A good time to set targets is just before the budget is planned, since targets will help you know how many supplies and other resources will be needed in the coming year.

If possible, you should work with your supervisor at the district level to set targets. He can help you keep regional and national goals in mind. However, your targets should be ones that you feel are possible to achieve. People will generally work harder to achieve targets if they feel the targets are realistic, and if they have been involved in setting them.

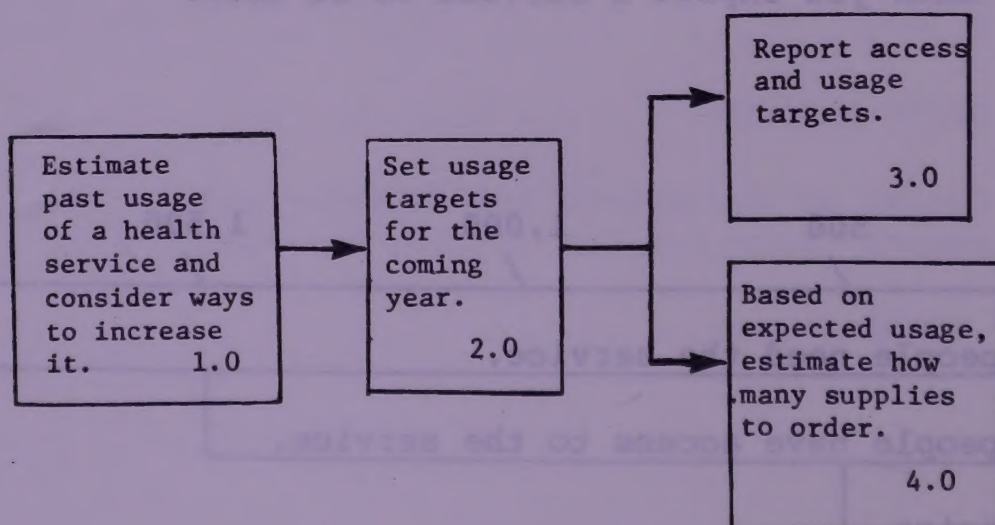
To set realistic targets, you will want to think of ways to:

- increase the number of people with access to services in your health area, and
- increase usage of services by people who already have access.

You can then estimate how much greater usage will be after these changes are made. Thus, your targets will be goals which you can really plan to achieve.

## LEARNING OBJECTIVE

The tasks involved in setting usage targets are shown in the following chart. The information, examples, and practice exercises in this module should prepare you to do these tasks in your own health area.



When setting targets, it is very important to consider the community's ideas about health needs and services. Community Involvement describes how to stay aware of these ideas. It also describes how to define access to health services in your area. You will need to know how many people have access to a service in order to set realistic usage targets.

At the end of each year you will want to evaluate achievement of targets. This type of evaluation is described in Monitoring and Evaluating Usage. Evaluation will tell you how much progress has been made in increasing usage of health services.



## 1.0 ESTIMATE PAST USAGE OF A HEALTH SERVICE AND CONSIDER WAYS TO INCREASE IT.

To know how well a service has been meeting health needs, you can compare the number of times the service is actually used to the number of times it needs to be used. Such a comparison can be stated as a usage rate:

$$\text{usage rate} = \frac{\text{actual usage}}{\text{desired usage}}$$

In this section of the module you will learn to calculate a usage rate for the past year.

### 1.1 ESTIMATE ACCESS TO THE SERVICE BY THE TARGET POPULATION.

In Community Involvement, you estimated the number of people with access to health facilities or community health workers. To estimate usage rates for a specific health service, you must know about access to that service by the target population of the service.

The target population of a service includes the people for whom the service is primarily or solely intended. These people may be of a certain age or sex or may have other common characteristics.

#### EXAMPLES

target population for diarrhoea treatment	=	children under age 5
---	---	-------------------------

target population for childhood immunizations	=	children under age 1
---	---	-------------------------

target population for education on breastfeeding	=	pregnant women and mothers of young children
--	---	--

You may have slightly different target populations for these services in your area.

In most areas, there are some people who do not have access to health services they need. Even if they have access to services offered by a community health worker, they may not have access to



other services offered only at the health centre. In order to set usage targets for a service, you need to find out how many target population members have access to that specific service.

**EXAMPLE** Fold out the map and definition of access in the front of this module and look at them. Some people do not have access to any health services. Others have access to community health workers but do not have access to services provided only at the health centre, such as measles immunizations.

The supervisor of Bornu Health Area wants to estimate the number of target population members who do have access to measles immunizations. In the large village called Bornu, there are 8,000 people. In Rimi, Arabu, and Kalama there are 5,900 more people with access to the health centre. There are 100 more people with access who do not live in villages.

Since a total of about 14,000 people have access to the health centre, and 4% (0.04) of the population is under age 1, the supervisor can estimate the target population with access to measles immunizations as follows:

$$14,000 \times 0.04 = 560 \text{ children under age 1 with access to measles immunizations}$$

## SHORT-ANSWER EXERCISE

Both the health centre and the community health workers in Bornu Health Area offer malaria treatment. According to the map and access definition, how many people have access to the health centre and community health workers in Bornu Health Area? Write the total number below:

The target population for malaria treatment is children under age 5, and 20% (0.20) of the population is under age 5. In the space below, estimate the target population with access to malaria treatment:



Answer: 20,000 people have access to the health centre and community health workers.

$$20,000 \times 0.20 = 4,000 \text{ children under age 5 with access to malaria treatment}$$

## 1.2 DECIDE WHAT TO COUNT AS ONE USE OF THE SERVICE.

You will want to count uses of a service in a way that will show how completely a health need is being met. For example, to estimate past usage of a treatment service (such as treatment of diarrhoea), you will probably want to count the number of new episodes\* treated. This will help you to know if you are treating many of the episodes occurring, or if you need to reach more.

For other services, you may simply want to count the number of times the service was given. For example, for measles immunization, you may want to count the numbers of measles immunizations given during past years.

Sometimes you may want to count both new episodes treated and times the service was given. This will tell you how many repeat visits are typical for a single episode. Knowing about repeat visits can help you in planning staff time and ordering supplies.

## SHORT-ANSWER EXERCISE

What would you count as one use of a malaria treatment service? Write your answer below:

---

\*A new episode is an occurrence of a health problem which happens after any previous occurrence has stopped.



Answer: Most supervisors would probably want to count each new malaria episode treated as one use of the service.

### 1.3 ESTIMATE THE NUMBER OF USES OF THE SERVICE IN PAST YEARS.

This step could be done for as many as 5 past years if your records are good. If you estimate usage for several past years, it will help you see trends in usage, which will help you to set targets.

You can estimate the number of uses of a service in one of 3 ways:

- **FIRST WAY TO ESTIMATE NUMBER OF USES**

If you have records showing uses of the service, review the records and add up the uses for each year. (For example, count the number of new episodes treated or the number of times the service was given.)

- **SECOND WAY TO ESTIMATE NUMBER OF USES**

If records show only the number of times services were provided, but you want to count new episodes, estimate the number of times one person typically receives treatment for one episode of the health problem.

Health workers may remember how often people usually come for treatment of one episode. Survey data from nearby areas may also indicate the number of times people come for treatment of one episode. Or you can get the number by reviewing a sample of individual patient records. The following example shows how to use this number to estimate the number of new episodes treated.



EXAMPLE A supervisor found that about half of the children under age 5 with diarrhoea come 2 times for treatment of the same episode of diarrhoea. The rest come only once. Thus, there is an average of about 1.5 visits for each new episode of diarrhoea treated. He could estimate the number of new episodes treated as follows:

$$\begin{array}{l} \text{Number of times} \\ \text{diarrhoea treatment} \\ \text{given} \end{array} \div 1.50 = \begin{array}{l} \text{Estimated number of} \\ \text{new episodes that} \\ \text{received treatment} \end{array}$$

Note: Since half (0.50) of the children make 2 visits and half make only 1, the supervisor calculated the average 1.50 as follows:

$$\frac{5}{10} \text{ of the children } \times 2 \text{ visits } = \frac{10}{10} \text{ (1.00)}$$

$$\frac{5}{10} \text{ of the children } \times 1 \text{ visit } = \frac{5}{10} \text{ (0.50)}$$

---


$$\frac{10}{10} \text{ (one child) makes } \frac{15}{10} \text{ (1.50) visits on the average per episode treated}$$



## SHORT-ANSWER EXERCISE

A supervisor wanted to count new episodes of malaria treated. The records showed that there were 140 visits for malaria treatment last year. A health worker has said that about 4 out of every 10 children treated (0.40) return for extra pills. That would mean that 6 out of 10 (0.60) come only once. Thus, the supervisor calculated the average visits for each new episode of malaria treated as follows:

$$\frac{4}{10} \text{ of the children } \times 2 \text{ visits } = \frac{8}{10} \text{ (.80)}$$

$$\frac{6}{10} \text{ of the children } \times 1 \text{ visit } = \frac{6}{10} \text{ (.60)}$$

---

$$\frac{10}{10} \text{ (one child) makes } \frac{14}{10} \text{ (1.4) visits on the average per episode treated}$$

In the space below, estimate the number of new episodes of malaria treated last year:



Answer:

$$140 \div 1.4 = 100 \text{ new episodes of malaria treated}$$

● **THIRD WAY TO ESTIMATE NUMBER OF USES**

If there are no records or records are very bad, you can ask experienced health workers for their opinions on past usage.

**EXAMPLE** If health workers reported that they usually gave about 50 measles immunizations per month, a supervisor could estimate the number of immunizations given in a year as follows:

50 measles immunizations per month	x	12 months in a year	=	600 measles immunizations given in a year
--	---	------------------------	---	---

**Note:** This method would not be helpful if usage of the service varies greatly from season to season. For example, it probably would not be useful for estimating usage of diarrhoea treatment services.

## SHORT-ANSWER EXERCISE

The nurse-midwives at a health centre say that there are about 40 visits for prenatal care each month. Estimate how many prenatal visits there are in a year:



Answer:

$$40 \times 12 = 480 \text{ prenatal visits in a year}$$

#### 1.4 ESTIMATE DESIRED USAGE OF THE SERVICE.

Section 1.3 told how to estimate actual usage of a service. Next you will want to estimate desired usage, so that you can compare it to actual usage. For now, consider only desired usage by the target population with access to the service. That is the number of times a service would be used if all target population members with access came when they needed the service.

desired usage by target population with access	=	number of target population members with access to the service	X	estimated number of times the service is needed by a target population member per year
--	---	---	---	--

#### EXAMPLES

desired usage of diarrhoea treatment	=	number of children under age 5 with access to treat- ment	X	estimated number of diarrhoea episodes needing treatment per child under age 5 per year*
--	---	--	---	--

desired usage of nutritional monitoring	=	number of children under age 5 with access to nutri- tional monitoring worker	X	12 (since monitoring should be done once a month)
---	---	---	---	---

#### SHORT-ANSWER EXERCISE

Complete the formula for estimating desired usage of the following service:

desired usage of measles immunizations	=		X
--	---	--	---

\*In your country, this number may have been estimated by means of surveys conducted by the national or regional level. If so, you may use that number. If not, you may use 2.2, which is the global estimate.



Answer:

desired usage of measles immunizations X number of children under age 1 with access to measles immunizations = 1 (since only 1 dose is needed)

### 1.5 CALCULATE A USAGE RATE FOR THE PAST 12 MONTHS.

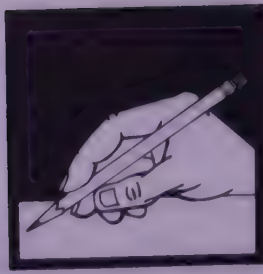
Remember that calculating a usage rate is a way of comparing actual usage and desired usage:

$$\text{usage rate} = \frac{\text{actual usage}}{\text{desired usage}}$$

In the next exercise, you will calculate a usage rate by doing the steps which have been discussed so far in this module:

- A. ESTIMATE ACCESS TO THE SERVICE BY THE TARGET POPULATION.
- B. ESTIMATE THE NUMBER OF USES OF THE SERVICE IN THE PAST 12 MONTHS.
- C. ESTIMATE DESIRED USAGE OF THE SERVICE.
- D. CALCULATE A USAGE RATE FOR THE PAST 12 MONTHS.





## EXERCISE A

In this exercise you will calculate a usage rate for the target population with access to diarrhoea treatment in Bornu Health Area. This usage rate will be for the past 12 months.

1. Read the following information about Bornu Health Area:

- The health centre and both of the community health workers in Bornu Health Area provide diarrhoea treatment.
- The target population for diarrhoea treatment is children under age 5. About 20% (0.20) of the population is under age 5.
- The supervisor wants to count each new episode treated as a use of the diarrhoea treatment service, but the Patient Registers kept by the health centre and community health workers show only the number of visits for diarrhoea treatment. There were 600 visits to the health centre, 110 visits to one community health worker, and 90 visits to the other community health worker.
- An experienced health worker has said that fewer than 1 out of 10 children with diarrhoea return for more treatment of the same episode of diarrhoea. Thus, the supervisor decided to count each visit for diarrhoea treatment as one new episode treated.

2. Using the map of Bornu Health Area and the information above, complete Part 1 of the Target Worksheet, which begins on the next page. (Later in the module you will use some of the answers from Part 1 to complete Part 2 and set usage targets.)



## TARGET WORKSHEET - PART 1

This part of the worksheet will help you calculate a usage rate for a service for the past 12 months.

### A. ESTIMATE ACCESS TO THE SERVICE BY THE TARGET POPULATION.

A-1 Add up the number of people with access to health facilities or workers that offer the service.

-----  
people who now  
have access

A-2 Estimate the number of target population members who have access to the service.

-----	X	-----	=	-----
people who now have access		proportion who are members of the target population		target population with access

### B. ESTIMATE THE NUMBER OF USES OF THE SERVICE IN THE PAST 12 MONTHS. (Use the space below for calculations.)

-----  
actual usage  
(in numbers)

### C. ESTIMATE DESIRED USAGE OF THE SERVICE.

-----	X	----- <sup>2*</sup> -----	=	-----
target population with access		estimated times service is needed by a target population member in a year		desired usage

### D. CALCULATE A USAGE RATE FOR THE PAST 12 MONTHS.

-----	÷	-----	=	-----
actual usage		desired usage		usage rate for past 12 months

This rate shows what proportion of the desired number of uses actually occurred.

\*The estimate for Bornu Health Area is that a child under age 5 has about 2 episodes of diarrhoea needing treatment each year.

When you have finished this exercise, talk with the course facilitator.







## 2.0 SET USAGE TARGETS FOR THE COMING YEAR.

Usage targets are expected usage rates for the coming year. To set a usage target, you will need to consider ways in which both access and usage are likely to change.

Summary of things to consider when setting targets:

- expected changes in access
- usage patterns in past years
- factors which might increase or decrease future usage

Changes in access may be expected because of:

- increase or decrease in the number of health facilities, community health workers, or other health workers offering the service,
- increase or decrease in outreach services,
- better or worse roads, bridges, or public transportation, or
- groups of people moving into or out of the health area.





Reviewing usage data from past years will help you see any patterns in usage (for example, a slow but steady increase or decrease, or a sudden increase or decrease). Thinking about the reasons for changes in past usage will help you predict future usage.

**EXAMPLE** Suppose a supervisor saw several sudden increases in usage when he reviewed past data. These increases were followed by slow decreases in usage. By talking with health workers, the supervisor learned that the increases in usage happened when new services were being promoted. Since oral rehydration (OR) therapy will soon be offered in the area, the supervisor expects that promotion of OR therapy will lead to an increase in usage of all health services.

## SHORT-ANSWER EXERCISE

A supervisor in an urban area noticed that usage of childhood immunization services had greatly increased when an evening clinic was offered once a week. Health workers say that the evening clinic is very crowded with working mothers and their children. What would you expect to happen if the evening clinic was offered twice each week?



Answer: Usage of immunization services would probably increase even more, since mothers would have a choice of 2 evenings, and the clinic would be less crowded.

Here is a summary of factors that might increase or decrease future usage of a service:

- the community's ideas about the need for the service (for example, the community's ideas about diarrhoea)
- plans for changing ideas about the need for the service (for example, plans for health education and promotion of services)
- the community's ideas about the type of service now offered
- plans for offering new, more effective types of service (for example, plans for treating diarrhoea with OR therapy instead of Kaolin)
- plans for making the service easier and more pleasant to use (for example, by decreasing waiting time, improving staff, making sure ORS packets are available, reducing charges for services, increasing health centre hours)
- plans for providing services which the community considers important. (If you add services which the community considers important, people will be more likely to come for all services offered.)
- willingness of community members to help promote services
- availability or lack of resources for new services, promotion, outreach personnel, longer health centre hours, etc.
- likelihood that certain groups of people with access will choose to go elsewhere for services (for example, to private physicians, traditional healers).



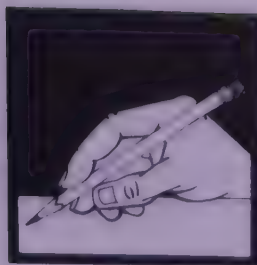
SO FAR IN THIS MODULE YOU HAVE:

- estimated usage of a service in the past 12 months (Target Worksheet - Part 1), and
- considered reasons that changes in access and usage might be expected.

Now you are ready to set usage targets for the coming year. Part 2 of the Target Worksheet is provided in the next exercise to help you do this. The steps of the worksheet are:

- A. ESTIMATE ACCESS TO THE SERVICE IN THE COMING YEAR.
- B. ESTIMATE DESIRED USAGE IN THE COMING YEAR.
- C. ESTIMATE EXPECTED USAGE IN THE COMING YEAR. (This number would represent what you actually expect to happen, as opposed to what would be desired.)
- D. SET USAGE TARGET FOR THE TARGET POPULATION WITH ACCESS.
- E. SET USAGE TARGET FOR THE ENTIRE HEALTH AREA.





## EXERCISE C

In this exercise you will set usage targets for diarrhoea treatment in Bornu Health Area in the coming year.

1. Fold out the form titled "Targets and Achievements" on page 31. As part of this exercise, you will record information and targets for the diarrhoea treatment service in the section of the form which is completed at the beginning of the year.
2. Read the following information about Bornu Health Area:

### Factors Which Will Affect Access:

- Early next year, a bridge will be built across the river near Prambas.
- A new community health worker will soon be serving Molaka.
- There is no reason to expect that any people who currently have access will lose that access.

### Past Usage Patterns:

For the past 3 years, usage of the diarrhoea treatment service has not increased very much. Here is a table that shows the number of uses in each year:

	Health Centre	1st CHW	2nd CHW
1981	500	100	-
1982	600	100	90
1983	600	110	90

Kaolin is currently being given for treatment of diarrhoea. The supervisor and health workers think that the people do not like this service very much.

### Plans for Increasing Usage:

- Treatment of diarrhoea with OR therapy will begin early in the year. There will be no more treatment with Kaolin. OR therapy will be promoted.
- When health staff are trained to give OR therapy, they will also be trained to give health education about diarrhoea. This may cause more mothers to consider diarrhoea a serious problem and bring their children for treatment when they have signs of dehydration.
- When training health workers, the supervisor will stress the importance of being helpful and answering the questions of people who come for services.

### Other Data Needed for Setting Targets:

- The total population of Bornu Health Area is 25,000.
  - About 20% (0.20) of the population are under age 5.
  - The district supervisor has told the Bornu Health Area supervisor that improvement of diarrhoea treatment is very important. The government hopes that, 5 years from now, 80% of diarrhoea cases in the whole region will be treated with OR therapy. Thus, it is hoped that Bornu Health Area's targets will be as high as can be considered realistic.
3. Now complete Part 2 of the Target Worksheet which begins on the next page. To complete the worksheet you will need to use the information just given, the map of Bornu Health Area, and Part 1 of the worksheet (page 13).



## TARGET WORKSHEET - PART 2

This part of the worksheet will help you set usage targets for a service for the coming year.

### A. ESTIMATE ACCESS TO THE SERVICE IN THE COMING YEAR.

A-1 Estimate the number of people who will have access to health facilities or workers that will offer the service in the coming year:

_ _ _ _ _	+	_ _ _ _ _	-	_ _ _ _ _	=	_ _ _ _ _
people who now have access (see Part 1)		new people who will have access in the coming year		people who will lose access in the coming year		people expected to have access

A-2 Estimate the number of target population members among people expected to have access to the service:

_ _ _ _ _	X	_ _ _ _ _	=	_ _ _ _ _
people expected to have access		proportion who are members of the target population		expected target population with access

A-3 Record the expected target population with access on the "Targets and Achievements" form, page 31.

### B. ESTIMATE DESIRED USAGE IN THE COMING YEAR.

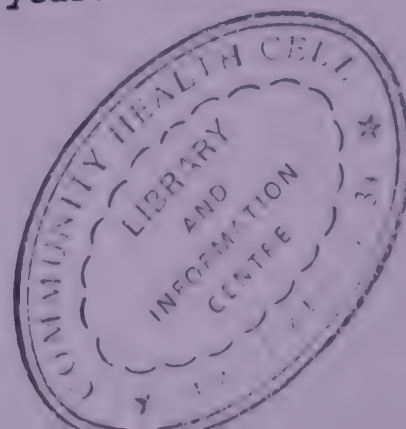
For now, consider only desired usage by the target population with access.

B-1 Estimate desired usage by multiplying as follows:

_ _ _ _ _	X	_ _ _ <sup>2*</sup> _ _ _	=	_ _ _ _ _
expected target population with access		estimated times the service is needed by a target population member in a year		desired usage by the target population with access

B-2 Record desired usage by the target population with access on the "Targets and Achievements" form.

\*In Bornu Health Area, on the average, a child under age 5 has about 2 episodes of diarrhoea needing treatment each year.



C. ESTIMATE EXPECTED USAGE IN THE COMING YEAR.

C-1 In Part 1 you calculated a usage rate for the past 12 months. Calculate what usage would be if there is no change in that usage rate:

----- desired usage by the target population with access	X	----- usage rate for the past 12 months (See Part 1)	=	----- usage if there is no change in the usage rate
--	---	---	---	---

C-2 Consider usage patterns in past years and factors which might increase or decrease future usage of the service. Talk with your health workers about these factors and find out how much they expect usage will increase or decrease in the coming year. Also talk with your supervisor about regional and national goals and whether they will affect resources available to you.

Based on these discussions, estimate expected usage for the coming year. Remember that:

- Usage by new people with access may not be as great as usage by people who have had access before.
- If usage is already very high, increases may be harder to achieve than if usage is low. When usage is low, there is more room for improvement, and increases in usage may be greater.

Fold out page 29 for an estimate of  
expected usage in Bornu Health Area.

Usage will increase (or decrease) to: -----  
expected usage

C-3 Record the expected usage for the coming year on the "Targets and Achievements" form.



D. SET USAGE TARGET FOR THE TARGET POPULATION WITH ACCESS.

D-1 Calculate the target by dividing as follows:

$$\frac{\text{expected usage (answer to C-2)}}{\text{desired usage (answer to B-1)}} = \text{usage target for those with access}$$

D-2 Express this usage target as a percentage and enter it on the "Targets and Achievements" form.

E. SET USAGE TARGET FOR THE ENTIRE HEALTH AREA.

If some target population members in your health area do not have access, you will need to calculate a different usage target for the entire health area.

E-1 Estimate the total number of target population members in the health area.

$$\text{population of the health area} \times \text{proportion that are members of the target population} = \text{target population in the health area}$$

E-2 Record the total target population in the health area on the "Targets and Achievements" form.

E-3 Estimate desired usage by the total target population in the health area by multiplying as follows:

$$\text{target population in the health area} \times \text{estimated times the service is needed by a target population member in a year} = \text{desired usage for health area}$$

E-4 Record the desired usage for the entire health area on the "Targets and Achievements" form.

E-5 To calculate the usage target for the entire health area, divide as follows:

$$\frac{\text{expected usage (answer to C-2)}}{\text{desired usage for health area}} = \text{usage target for the health area}$$

E-6 Express the usage target for the health area as a percentage and record it on the "Targets and Achievements" form.

## WHAT DO THE TARGETS MEAN?

You have just set targets for usage of the diarrhoea treatment service in Bornu Health Area. You wrote the targets as percentages on the "Targets and Achievements" form. Fill in the blanks below to remember what the percentages mean:

In Bornu Health Area, \_\_\_\_\_% of the diarrhoea episodes in children under age 5 with access will be treated appropriately.

\_\_\_\_\_% of the diarrhoea episodes in all children under age 5 in the health area will be treated appropriately.

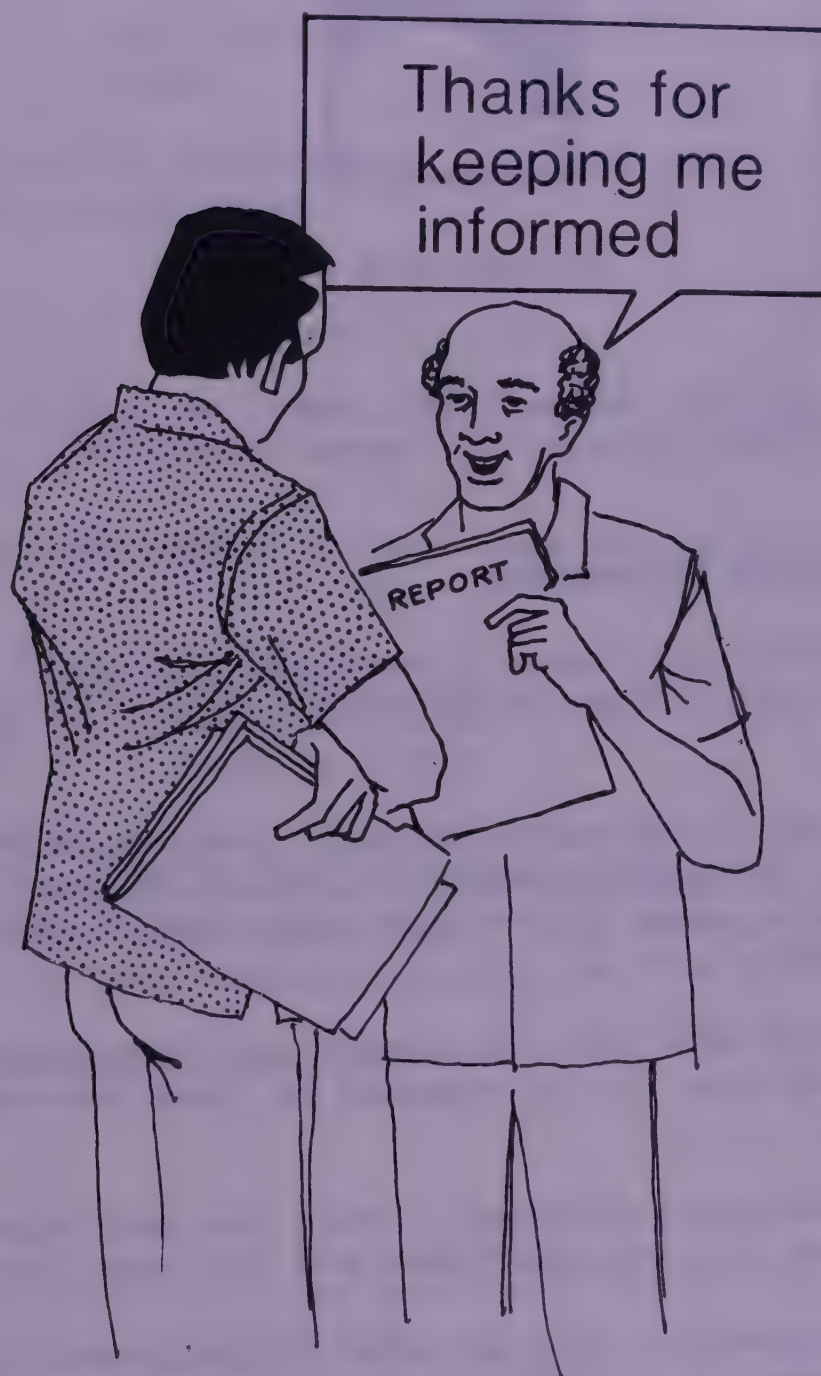
When you have finished this exercise, talk with the course facilitator.

Notice that an extra copy of the Target Worksheet (Parts 1 and 2) is included in the Annex in the back of this module. This is for you to use when setting targets for your health area.



### 3.0 REPORT ACCESS AND USAGE TARGETS.

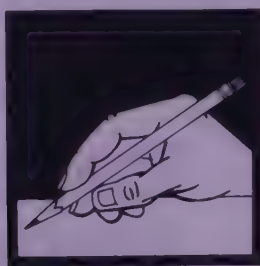
Report your access estimates and usage targets to your supervisor. The report should include the type of information that is on the "Targets and Achievements" form, but you may choose to organize your report in a different way. This report will be very important to your supervisor, as he can use it to set usage targets for the entire area assigned to him. (At the end of the year, when you evaluate achievement of targets, you will complete the rest of the form and send that information to your supervisor as well.)



## 4.0 BASED ON EXPECTED USAGE, ESTIMATE HOW MANY SUPPLIES TO ORDER.

In addition to the usage estimates already described, you will need to know:

- the number of supplies needed each time the service is used,
- the amount of supplies likely to be wasted or used for people who are not in the target population,
- the number of supplies that you expect will still be in stock when your new order arrives.



### EXERCISE D

In this exercise you will estimate the number of packets of oral rehydration salts (ORS) to order for Bornu Health Area in the coming year.

#### 1. Read the following information:

- It is estimated that about 2 one-litre packets of ORS will be needed for each episode of diarrhoea treated in Bornu Health Area.
- The supervisor in Bornu Health Area plans to increase his estimate of ORS packets needed by 30% (0.30) to allow for reserve stock, usage in the population over 5 years old, and possible waste.
- The supervisor will soon be placing his first order for ORS. He has no ORS now. He is supposed to place one order for the entire year.

#### 2. Complete the following worksheet. When you need data, refer to the "Targets and Achievements" form and the above information.

A copy of this worksheet is also included in the Annex for you to use when calculating supplies to order for your health area.



## WORKSHEET ON ORDERING SUPPLIES

- A. Estimate the number of supplies needed for usage of the service in the coming year:

$$\frac{\text{expected usage}}{\text{number of supplies needed for each use of the service}} = \frac{\text{number needed for expected usage}}{\text{number of supplies needed for each use of the service}}$$

- B. Adjust the number needed for expected usage to allow for extra usage of supplies:

$$\left[ \frac{\text{number needed for expected usage}}{\text{proportion to allow for extra usage}} \right] + \text{number needed for expected usage} = \text{total number needed}$$

- C. Subtract the number of supplies you expect to have in stock at the beginning of the coming year:

$$\frac{\text{total number needed}}{\text{amount in stock}} = \text{number to order for the entire year}$$

- D. Divide the result of step C by the number of orders you will make in a year.

$$\frac{\text{number to order for entire year}}{\text{number of orders made in a year}} = \text{number for a single order}$$

If the need for a service is greater at certain times of the year than at others, you may need to adjust the number of supplies to order for different ordering periods. (For example you might need to order more ORS for the rainy season and less for the dry season.)

BE SURE TO ORDER WELL IN ADVANCE.

When you have finished this exercise, talk with the course facilitator.



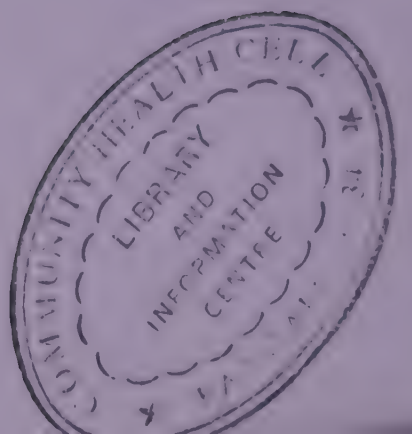








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## REMEMBER THIS

### ABOUT TARGETS

- Targets help people:
  - know the goals they are working towards
  - see their progress and feel proud of their work
  - estimate what supplies and resources are needed.
- People will generally work harder to achieve targets if:
  - the targets are realistic, and
  - they have helped to set the targets.
- To set realistic targets for usage of any health service, you will first need to:
  - Estimate past usage of the health service. (You can use Target Worksheet - Part 1 in this module to do this.)
  - Consider ways to increase access and usage. Discuss these with your health workers and with your own supervisor.

Then you can use the Target Worksheet - Part 2 to set targets. The targets will show what percentage of desired usage you expect to achieve. For example, targets for usage of the diarrhoea treatment service might be:

\_\_\_\_\_ % of diarrhoea episodes in children under age 5 with access will be given appropriate treatment.

\_\_\_\_\_ % of diarrhoea episodes in children under age 5 in the entire health area will be given appropriate treatment.





## ANNEX

Blank Copies of Worksheets and "Targets and Achievements" Form  
for Use in Your Own Health Area





# TARGET WORKSHEET - PART 1

This part of the worksheet will help you calculate a usage rate for a service for the past 12 months.

## A. ESTIMATE ACCESS TO THE SERVICE BY THE TARGET POPULATION.

A-1 Add up the number of people with access to health facilities or workers that offer the service.

people who now have access

A-2 Estimate the number of target population members who have access to the service.

$$\begin{array}{c} \text{people who now} \\ \text{have access} \end{array} \times \begin{array}{c} \text{proportion who are} \\ \text{members of the} \\ \text{target population} \end{array} = \begin{array}{c} \text{target population} \\ \text{with access} \end{array}$$

## B. ESTIMATE THE NUMBER OF USES OF THE SERVICE IN THE PAST 12 MONTHS. (Use the space below for calculations.)

actual usage  
(in numbers)

## C. ESTIMATE DESIRED USAGE OF THE SERVICE.

$$\begin{array}{c} \text{target population} \\ \text{with access} \end{array} \times \begin{array}{c} \text{estimated times} \\ \text{service is needed} \\ \text{by a target population} \\ \text{member in a year} \end{array} = \begin{array}{c} \text{desired usage} \end{array}$$

## D. CALCULATE A USAGE RATE FOR THE PAST 12 MONTHS.

$$\begin{array}{c} \text{actual usage} \end{array} \div \begin{array}{c} \text{desired usage} \end{array} = \begin{array}{c} \text{usage rate for} \\ \text{past 12 months} \end{array}$$

This rate shows what proportion of the desired number of uses actually occurred.

## TARGET WORKSHEET - PART 2

This part of the worksheet will help you set usage targets for a service for the coming year.

### A. ESTIMATE ACCESS TO THE SERVICE IN THE COMING YEAR.

A-1 Estimate the number of people who will have access to health facilities or workers that will offer the service in the coming year:

$$\begin{array}{rclcl}
 \text{---} & & + & \text{---} & - & \text{---} & = & \text{---} \\
 \text{people who} & & & \text{new people} & & \text{people who} & & \text{people expected} \\
 \text{now have} & & & \text{who will have} & & \text{will lose} & & \text{to have access} \\
 \text{access (see} & & & \text{access in the} & & \text{access in the} & & \\
 \text{Part 1)} & & & \text{coming year} & & \text{coming year} & & 
 \end{array}$$

A-2 Estimate the number of target population members among people expected to have access to the service:

$$\begin{array}{rclcl}
 \text{---} & & \times & \text{---} & = & \text{---} \\
 \text{people expected} & & & \text{proportion} & & \text{expected target} \\
 \text{to have access} & & & \text{who are members} & & \text{population with} \\
 & & & \text{of the target} & & \text{access} \\
 & & & \text{population} & & 
 \end{array}$$

A-3 Record the expected target population with access on the "Targets and Achievements" form.

### B. ESTIMATE DESIRED USAGE IN THE COMING YEAR.

For now, consider only desired usage by the target population with access.

B-1 Estimate desired usage by multiplying as follows:

$$\begin{array}{rclcl}
 \text{---} & & \times & \text{---} & = & \text{---} \\
 \text{expected target} & & & \text{estimated times} & & \text{desired usage} \\
 \text{population with} & & & \text{the service is} & & \text{by the target} \\
 \text{access} & & & \text{needed by a} & & \text{population with} \\
 & & & \text{target population} & & \text{access} \\
 & & & \text{member in a year} & & 
 \end{array}$$

B-2 Record desired usage by the target population with access on the "Targets and Achievements" form.



C. ESTIMATE EXPECTED USAGE IN THE COMING YEAR.

C-1 In Part 1 you calculated a usage rate for the past 12 months. Calculate what usage would be if there is no change in that usage rate:

-----	X	-----	=	-----
desired usage		usage rate for		usage if there
by the target		the past 12 months		is no change
population with		(See Part 1)		in the usage
access				rate

C-2 Consider usage patterns in past years and factors which might increase or decrease future usage of the service. Talk with your health workers about these factors and find out how much they expect usage will increase or decrease in the coming year. Also talk with your supervisor about regional and national goals and whether they will affect resources available to you.

Based on these discussions, estimate expected usage for the coming year. Remember that:

- Usage by new people with access may not be as great as usage by people who have had access before.
- If usage is already very high, increases may be harder to achieve than if usage is low. When usage is low, there is more room for improvement, and increases in usage may be greater.

Usage will increase (or decrease) to: -----  
expected usage

C-3 Record the expected usage for the coming year on the "Targets and Achievements" form.

D. SET USAGE TARGET FOR THE TARGET POPULATION WITH ACCESS.

D-1 Calculate the target by dividing as follows:

$$\frac{\text{expected usage (answer to C-2)}}{\text{desired usage (answer to B-1)}} = \text{usage target for those with access}$$

D-2 Express this usage target as a percentage and enter it on the "Targets and Achievements" form.

E. SET USAGE TARGET FOR THE ENTIRE HEALTH AREA.

If some target population members in your health area do not have access, you will need to calculate a different usage target for the entire health area.

E-1 Estimate the total number of target population members in the health area.

$$\text{population of the health area} \times \text{proportion that are members of the target population} = \text{target population in the health area}$$

E-2 Record the total target population in the health area on the "Targets and Achievements" form.

E-3 Estimate desired usage by the total target population in the health area by multiplying as follows:

$$\text{target population in the health area} \times \text{estimated times the service is needed by a target population member in a year} = \text{desired usage for health area}$$

E-4 Record the desired usage for the entire health area on the "Targets and Achievements" form.

E-5 To calculate the usage target for the entire health area, divide as follows:

$$\frac{\text{expected usage (answer to C-2)}}{\text{desired usage for health area}} = \text{usage target for the health area}$$

E-6 Express the usage target for the health area as a percentage and record it on the "Targets and Achievements" form.



TARGETS AND ACHIEVEMENTS

Health Area: \_\_\_\_\_ Year of Report: From \_\_\_\_\_ Through \_\_\_\_\_  
(month) (year) (month) (year)

Types of Health Facilities and Health Workers in Health Area (Indicate Number of Each):

\_\_\_\_\_ Health Centre \_\_\_\_\_ Community Health Workers \_\_\_\_\_ Dispensary \_\_\_\_\_ Hospital \_\_\_\_\_ Other \_\_\_\_\_

COMPLETE AT BEGINNING OF YEAR:									COMPLETE AT END OF YEAR:		
Service	Target Population Definition	Expected Target Population With Access	Desired Usage by Target Population With Access	Expected Usage	Usage Target for Those With Access	Total Target Population in Health Area	Desired Usage for Health Area	Usage Target for Health Area	Actual Usage	Usage Rate for Those With Access	Usage Rate for Health Area
Treatment of Diarrhoea	Children Under Age 5										
Measles Immunization	Children Under Age 1										
DPT-3	Children Under Age 1										
Treatment of Malaria	Children Under Age 5										

Comments (for example, assumptions made in setting targets, reasons why targets were or were not achieved):

Signature: \_\_\_\_\_ Position: \_\_\_\_\_ Date Targets Set: \_\_\_\_\_  
Date Evaluated: \_\_\_\_\_





# WORKSHEET ON ORDERING SUPPLIES

- A. Estimate the number of supplies needed for usage of the service in the coming year:

$$\begin{array}{c} \text{-----} \\ \text{expected usage} \end{array} \times \begin{array}{c} \text{-----} \\ \text{number of supplies} \\ \text{needed for each} \\ \text{use of the service} \end{array} = \begin{array}{c} \text{-----} \\ \text{number needed for} \\ \text{expected usage} \end{array}$$

- B. Adjust the number needed for expected usage to allow for extra usage of supplies:

$$\left[ \begin{array}{c} \text{-----} \\ \text{number needed} \\ \text{for expected} \\ \text{usage} \end{array} \times \begin{array}{c} \text{-----} \\ \text{proportion} \\ \text{to allow} \\ \text{for extra} \\ \text{usage} \end{array} \right] + \begin{array}{c} \text{-----} \\ \text{number} \\ \text{needed for} \\ \text{expected} \\ \text{usage} \end{array} = \begin{array}{c} \text{-----} \\ \text{total number} \\ \text{needed} \end{array}$$

- C. Subtract the number of supplies you expect to have in stock at the beginning of the coming year:

$$\begin{array}{c} \text{-----} \\ \text{total number} \\ \text{needed} \end{array} - \begin{array}{c} \text{-----} \\ \text{amount in stock} \end{array} = \begin{array}{c} \text{-----} \\ \text{number to order} \\ \text{for the entire} \\ \text{year} \end{array}$$

- D. Divide the result of step C by the number of orders you will make in a year.

$$\begin{array}{c} \text{-----} \\ \text{number to order} \\ \text{for entire year} \end{array} \div \begin{array}{c} \text{-----} \\ \text{number of orders} \\ \text{made in a year} \end{array} = \begin{array}{c} \text{-----} \\ \text{number for a} \\ \text{single order} \end{array}$$

If the need for a service is greater at certain times of the year than at others, you may need to adjust the number of supplies to order for different ordering periods. (For example you might need to order more ORS for the rainy season and less for the dry season.)

BE SURE TO ORDER WELL IN ADVANCE.





## DEFINITIONS OF TERMS

- Access -** the opportunity to obtain or use a service. People who have access to a health service are those who live near enough to use it.
- DPT-3 -** the third in the series of 3 injections for immunization against diphtheria, pertussis, and tetanus.
- Episode -** a single occurrence of a health problem. A child may have several separate episodes of diarrhoea in one year.
- Estimate -** to make the best possible judgment based on available information. You can estimate future usage of a service by considering current usage, past trends in usage, plans for improving the service, etc. Then you will have an estimate of future usage.
- Health area -** the geographic area assigned to a supervisor by the government. A health area may include a health facility, community health workers, or both.
- New episode -** an occurrence of a health problem which happens after any previous occurrence has stopped. If a child has diarrhoea and the diarrhoea stops, but one week later he has diarrhoea again, then it is a new episode of diarrhoea.
- Percentage -  
(%)** a part of a whole expressed in hundreths. If 50% is the percentage of people that are female, it means that 50 out of every 100 people are female. The following examples show different ways of expressing the same meaning:
- $50\% = 0.50 = 50/100$
- $42\% = 0.42 = 42/100$
- $4\% = 0.04 = 4/100$
- To multiply by a percentage, first write it as a decimal fraction, for example, 0.42. (See your course facilitator if this is confusing.)
- Proportion -** the relationship of a part to the whole, often written as a decimal fraction. If the proportion of children who have access to a service is 0.37, then 37 out of 100 children have access.

- Target - a goal to work towards, expressed as a number or rate.
- Target population - the people for whom a service is primarily (or solely) intended. The target population for diarrhoea treatment is children under 5.
- Usage - the extent to which a service is used. Usage can be stated as the number of times a service is used or as a usage rate.
- Usage rate - a proportion or percentage calculated as follows:
- $$\text{usage rate} = \frac{\text{actual usage}}{\text{desired usage}}$$
- Actual usage - the number of times a service is really used. Reviewing records is one way to estimate actual usage of a service.
- Desired usage - the number of times a service would be used if members of the target population came when they needed the service. Desired usage is usually greater than actual usage, since some target population members do not use the service.
- Use of a service - what you count to measure usage, for example, new episodes treated or times the service is given.













